

REMARKS

This responds to the Office Action mailed on June 14, 2006.

Claims 4, 6-7, 11, and 13-21 have been canceled. Claims 1-3, 5, 8-10, and 12 have been amended. Claims 22-25 are new. Thus, claims 1-3, 5, 8-10, 12, and 22-25 are now pending.

For the convenience of the Examiner, Applicants' remarks concerning the claims will be presented in the same order in which the Examiner presented them in the Office Action.

Amendments to Claims 1-3, 5, 8-10, and 12

Claim 1 has been amended by substituting "substrate" for "layered wiring device"; and by substituting "a dielectric core member; a first plurality of dielectric lamination layers on a first side of the core member; a second plurality of conductive layers on the first side of the core member; a first number of dielectric lamination layers on a second side of the core member, wherein the first number is less than the first plurality; and a second number of conductive layers on the second side of the core member, wherein the second number is less than the second plurality" for "a plurality of electrical conduction members defining at least one electrical conduction path though a layered substrate, the at least one electrical conduction path having substantial impedance continuity maintained within a predefined limit therealong".

Claim 2 has been amended by substituting "substrate" for "layered wiring device"; by deleting ", the layered substrate including a dielectric core member, the substantial impedance continuity accomplished at least in part by at least one of: only one electrical conduction path lamination layer on opposing sides of the dielectric core member; a different number of electrical conduction path lamination layers on opposite sides of the dielectric core member; a different dielectric separation distance between electrical conduction path lamination layers on either side of the dielectric core member in comparison to other dielectric separation distances of electrical conduction path lamination layers of the layered substrate; and a"; by adding "wherein the dielectric core member comprises"; by deleting "of a material of the dielectric core member" ; and by deleting "layered".

Claim 3 has been amended by substituting “substrate” for “layered wiring device”; by deleting “the layered substrate being a laminated substrate having a dielectric core member and at least one dielectric lamination layer;” by inserting “wherein”; by substituting “has” for “having one of:”; by substituting “that” for “which”; by deleting “the”; by inserting “wherein the dielectric core member includes”; by substituting “than” for “that”; and by deleting “, at least one electrical conduction member of the at least one electrical conduction path being disposed on a first side of the dielectric core member, while other ones of the plurality of electrical conduction members having a potential parasitic capacitance relationship with the at least one electrical conduction member being disposed on an opposite side of the dielectric core member”.

Claim 5 has been amended by substituting “substrate” for “layered wiring device”; by inserting “wherein”; and by substituting “second number of conductive layers includes” for “the at least one electrical conduction member including”.

Claim 8 has been amended by substituting “a layered substrate including a dielectric core member; a first plurality of dielectric lamination layers on a first side of the core member; a second plurality of conductive layers on the first side of the core member; a first number of dielectric lamination layers on a second side of the core member, wherein the first number is less than the first plurality; and a second number of conductive layers on the second side of the core member, wherein the second number is less than the second plurality” for “a layered wiring device including a plurality of electrical conduction members defining at least one electrical conduction path through a layered substrate, the at least one electrical conduction path having substantial impedance continuity maintained within a predefined limit therealong”.

Claim 9 has been amended by substituting “wherein the dielectric core member comprises material of a different dielectric permittivity in comparison to a permittivity of material of dielectric lamination layers of the substrate” for “the layered substrate including a dielectric core member, the substantial impedance continuity accomplished at least in part by at least one of: only one electrical conduction path lamination layer on opposing sides of the dielectric core member; a different number of electrical conduction path lamination layers on opposite sides of the dielectric core member; a different dielectric separation distance between electrical conduction path lamination layers on either side of the dielectric core member in comparison to other dielectric separation distances of electrical conduction path lamination

layers of the layered substrate; and, a different dielectric permittivity of a material of the dielectric core member in comparison to a permittivity of a material of dielectric lamination layers of the layered substrate”.

Claim 10 has been amended by inserting “wherein”; by deleting “the layered substrate being a laminated substrate having a dielectric core member and at least one dielectric lamination layer;”; by substituting “has” for “having one of:”; by substituting “that” for “which”; by deleting “the”; by inserting “wherein the dielectric core member includes”; by substituting “than” for “that”; and by deleting “at least one electrical conduction member of the at least one electrical conduction path being disposed on a first side of the dielectric core member, while other ones of the plurality of electrical conduction members having a potential parasitic capacitance relationship with the at least one electrical conduction member being disposed on an opposite side of the dielectric core member”.

Claim 12 has been amended by inserting “wherein”; and by substituting “second number of conductive layers includes for “at least one electrical conduction member including”.

No new matter has been introduced. Support for these amendments may be found in FIG. 5 and in the accompanying written description on page 10-13 of Applicants’ original specification.

New Claims 22-25

New claims 22-25 have been added to provide additional coverage to which Applicants are entitled. No new matter has been introduced.

Support for claims 22 and 24 may be found on page 10, lines 6-10.

Support for claims 23 and 25 may be found on page 10, lines 18-20.

Rejection of Claims 1-21 Under 35 U.S.C. §112, Second Paragraph

Claims 1-21 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The Examiner stated that it was not clear what is meant by the term “impedance continuity”.

Applicants have deleted the term “impedance continuity” from the pending claims.

For the above reasons, Applicants respectfully request that the rejection of claims 1-21 under 35 U.S.C. §112, second paragraph, be withdrawn.

**Rejection of Claims 1, 8, and 15 under 35 U.S.C. §102(e)
as Anticipated by Ishihara**

Claims 1, 8, and 15 were rejected under 35 U.S.C. §102(e) as being anticipated by Ishihara et al. (U.S. 6,627,986). Applicants do not admit that Ishihara is prior art and reserve the right to swear behind Ishihara as provided for under 37 C.F.R. §1.131.

The rule under 35 U.S.C. §102 is well settled that “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2D 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). MPEP §2131.

Ishihara fails to disclose all of the structural elements recited in independent claims 1, 8, and 15, as amended. For example, regarding independent claim 1, Ishihara fails to disclose a first number of dielectric lamination layers on a second side of a core member, wherein the first number is less than the first plurality; and a second number of conductive layers on a second side of the core member, wherein the second number is less than the second plurality.

Ishihara fails to disclose similar limitations in independent claims 8 and 15.

For the above reasons, claims 1, 8, and 15 should be found to be allowable over Ishihara, and Applicants respectfully request that the rejection of claims 1, 8, and 15 under 35 U.S.C. §102(e) as anticipated by Ishihara be withdrawn.

Additional Elements and Limitations

Applicants consider additional elements and limitations of the claims to further distinguish over the cited references, and Applicants reserve the right to present arguments to this effect at a later date.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 10/090,735

Filing Date: March 6, 2002

Title: ARRANGEMENTS FOR MINIMIZING SIGNAL PATH DISCONTINUITIES

Page 10

Dkt: 884.B23US1

Conclusion

Applicants respectfully submits that claims 1-3, 5, 8-10, 12, and 22-25 are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney, Ann M. McCrackin (located in Minneapolis, Minnesota) at (612) 349-9592 or Applicants' below-signed attorney (located in Phoenix, Arizona) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

DAVID G. FIGUEROA ET AL.

By their Representatives,
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(602) 298-8920

By / Walter W. Nielsen /
Walter W. Nielsen
Reg. No. 25,539